

Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City, Metro Manila

TWENTIETH CONGRESS
First Regular Session

House Bill No. 3175



Introduced by Representative

BRIAN DANIEL POE LLAMANZARES, PhD, MNSA

**AN ACT STRENGTHENING AGRICULTURAL AND FISHERIES MECHANIZATION
BY INTEGRATING THE DEPARTMENT OF SCIENCE AND TECHNOLOGY IN THE
IMPLEMENTATION OF REPUBLIC ACT NO. 10601, AND FOR OTHER PURPOSES**

Explanatory Note

The agricultural and fisheries sectors remain vital pillars of the Philippine economy, providing livelihood and food security to millions of Filipinos. However, these sectors continue to grapple with low productivity and limited competitiveness, largely due to outdated production practices and insufficient mechanization.

Republic Act No. 10601, or the “**Agricultural and Fisheries Mechanization (AFMech) Law**,” was enacted to promote the development and adoption of modern mechanization systems in agriculture and fisheries. While the law established a robust institutional and policy framework, its full potential has yet to be realized, partly due to underutilization of the country’s scientific and technological resources.

This bill seeks to strengthen the implementation of R.A. No. 10601 by **integrating the Department of Science and Technology (DOST)** into the core structures and programs established under the law. Specifically, it proposes the following key amendments:

1. **Inclusion of the DOST in the formulation and implementation** of the National Agricultural and Fisheries Mechanization Program (NAFMP), to enhance scientific and technological support for mechanization efforts;
2. **Representation of the DOST in the National Agricultural and Fisheries Mechanization Committee (NAFMEC)**, ensuring that research and innovation are embedded in policy decisions;
3. **Joint leadership of the DOST in research, development, and extension (RDE)** programs under the AFMech Law, with focus on emerging technologies such as automation, robotics, and artificial intelligence (AI);
4. **Creation of Agri-Mechanization Innovation Hubs** in key agricultural regions to serve as centers for collaborative innovation, training, and technology adoption; and
5. **Implementation of nationwide capacity-building programs on AI and smart farming**, designed specifically for farmers, fisherfolk, and cooperatives.

The integration of DOST's scientific and technological expertise is essential to modernize the agriculture and fisheries sectors in line with global trends and climate-resilient strategies. This bill also provides for an initial appropriation of ₱500 million to jumpstart the joint programs and ensure their sustainability through inclusion in the General Appropriations Act.

In light of the urgent need to transform Philippine agriculture and fisheries into technology-driven, high-productivity sectors, **the immediate passage of this measure is earnestly sought.**



HON. BRIAN DANIEL POE LLAMANZARES, PhD, MNSA

Representative

FPJ Panday Bayanihan Party-List

Republic of the Philippines
HOUSE OF REPRESENTATIVES

Quezon City, Metro Manila

TWENTIETH CONGRESS

First Regular Session

House Bill No. 3175

Introduced by Representative

BRIAN DANIEL POE LLAMANZARES, PhD, MNSA

**AN ACT STRENGTHENING AGRICULTURAL AND FISHERIES MECHANIZATION
BY INTEGRATING THE DEPARTMENT OF SCIENCE AND TECHNOLOGY IN THE
IMPLEMENTATION OF REPUBLIC ACT NO. 10601, AND FOR OTHER PURPOSES**

*Be it enacted by the Senate and House of Representatives of the Philippines in Congress
assembled:*

**SECTION 1. Section 6 of Republic Act No. 10601 is hereby amended to read as
follows:**

“SEC. 6. National Agricultural and Fisheries Mechanization Program (NAFMP). —
The Department shall, in consultation with concerned agencies and stakeholders,
including the Department of Science and Technology (DOST), formulate and
implement a National Agricultural and Fisheries Mechanization Program (NAFMP).
The DOST shall play a key role in the program by providing research and
development (R&D) support, technology validation, and scientific expertise for the
development and dissemination of appropriate mechanization technologies.”

**SECTION 2. Section 7 of the same Act is hereby amended to include the following
provision:**

“SEC. 7. Creation of the National Agricultural and Fisheries Mechanization Committee (NAFMEC).— There is hereby created a National Agricultural and Fisheries Mechanization Committee (NAFMEC)...

The Committee shall be composed of representatives from the Department of Agriculture (DA), Department of Agrarian Reform (DAR), state universities and colleges (SUCs), Philippine Coconut Authority (PCA), Philippine Center for Postharvest Development and Mechanization (PhilMech), and other relevant agencies.

A representative from the Department of Science and Technology (DOST) shall be included as a regular voting member of the NAFMEC, to ensure the integration of scientific and technological perspectives in policymaking, program planning, and implementation.”

SECTION 3. Section 8 of the same Act is hereby amended to read as follows:

“SEC. 8. Research, Development, and Extension (RDE). — The Department shall pursue a unified and integrated RDE mechanism in coordination with the Department of Science and Technology (DOST), PhilMech, SUCs, and other government and private institutions. The DOST shall jointly lead the development, pilot testing, and scaling of agricultural and fisheries mechanization R&D projects, including advanced and emerging technologies such as automation, robotics, and artificial intelligence (AI).”

SECTION 4. A new section is hereby inserted to read as follows:

“SEC. __. Establishment of Agri-Mechanization Innovation Hubs. — The Department of Agriculture (DA), in partnership with the Department of Science and Technology (DOST), shall establish Agri-Mechanization Innovation Hubs across major agricultural regions. These hubs shall serve as centers for collaborative research, product prototyping, training, and demonstration of locally developed mechanization and digital farming technologies. The hubs shall also engage academic institutions, startups, equipment manufacturers, and farmer groups to accelerate the adoption of context-appropriate technologies.”

SECTION 5. A new section is hereby inserted to read as follows:

“SEC. __. Capacity Building on Artificial Intelligence (AI) and Smart Farming. — The Department of Science and Technology (DOST), in partnership with the DA and other stakeholders, shall develop and implement capacity-building programs for farmers and fisherfolk on the use of artificial intelligence (AI), data analytics,

precision agriculture, and smart farming technologies to improve productivity, efficiency, and sustainability. These programs shall include training modules, technology toolkits, and digital literacy initiatives tailored to smallholders and cooperatives.”

SECTION 6. Implementing Rules and Appropriations. – The DA and DOST shall jointly promulgate the necessary rules and regulations for the effective implementation of this Act within ninety (90) days from its effectivity.

The amount of Five Hundred Million Pesos (₱500,000,000.00) is hereby appropriated as initial funding for the joint R&D projects, innovation hubs, and capacity-building programs under this Act. Thereafter, such amounts as may be necessary shall be included in the annual General Appropriations Act.

SECTION 7. Separability Clause. – If any provision of this Act is declared unconstitutional or invalid, the remaining provisions not affected thereby shall continue to be in full force and effect.

SECTION 8. Repealing Clause. – All laws, presidential decrees, executive orders, rules and regulations or parts thereof inconsistent with or contrary to the provisions of this Act are hereby repealed or modified accordingly.

SECTION 9. Effectivity. – This Act shall take effect fifteen (15) days after its publication in the Official Gazette or in a newspaper of general circulation.

Approved,


HON. BRIAN DANIEL POE LLAMANZARES, PhD, MNSA
Representative
FPJ Panday Bayanihan Party-List